Grand Canyon College

3300 WEST CAMELBACK ROAD • (602) 249-3300 • POST OFFICE BOX 11097 • PHOENIX, ARIZONA 85061

Director of Computer Services

DIGITGRAPH
P. O. Box 4249
Tucson, Arizona 85717

5/15/78

May 10, 1978

LUG Member,

Our next meeting is scheduled for 1:30 PM on Monday, June 12. It will be held in Fleming 104 on the Grand Canyon College campus (directions are attached).

The following presentations are currently planned for the meeting:

1. A Task Builder Overview by John Ferguson
2. RMS-11/RMS-11K Optimization by Bill Boyle
3. DECUS Chicago Summary (RSTS V7 features, TRAX, Fortran Four-Plus under RSTS, etc.) by Frank Anderson

The saga of the funny name goes on. We submitted our application for official status to DECUS and they wrote to let us know that PLUG was already taken (Portland Local User's Group). They suggested PRLUG (Phoenix RSTS Local User's Group), bring your ideas to the next meeting.

As part of the newsletter you will find:

1) A copy of various LOGIN mods including auto-baud detection
2) Listings of tape utility programs that read or write EBCDIC tapes
3) A price list of special disk prices available to LUG members from BCS (also a LUG member)
4) Minutes of our last meeting
5) Applications to the DEBUG and RSTS Special Interest Groups of DECUS
6) A map of the Grand Canyon College Campus with directions to Fleming 104.

If you are not a member of DECUS, please let me know so that I can give you a copy of the application form. Membership is free to any DEC installation. If you are not on the mailing list for the RSTS SIG I encourage you to send in the application. The SIG newsletter is a very valuable information source for RSTS Users. For example, the last newsletter included:

1) Information on proposed terminal keyboard standards
2) A description of 6C hidden options and a patch to fix the known bugs in Control-T
3) A program to change Runoff files into BASIC-PLUS comment lines
4) An extensive set of LOGIN patches for multiple passwords, chaining, and audit trailing
5) A description of RSTS/E disk internals

The newsletter is well worth the price (its free!).

Frank

Frank Anderson
LUG Secretary

REAL-TIME SYSTEMS
Div. of Concurrent Operations Management

602-266-4491
4621 N. Sixteenth Street, Suite 509
Phoenix, AZ 85016

March 21, 1978

Mr. Frank Anderson
LUG Secretary
Grand Canyon College
3300 West Camelback Road
Phoenix, AZ 85061

Dear Frank,

As I promised at the last LUG meeting, I am enclosing the modifications to LOGIN.BAS for auto-baud detection. I also modified this program for automatic program chaining, and the capability of printing 'important' login messages as the enclosed documentation shows. If anyone is interested, I also have another modification for a mail system utilizing LOGIN.

Sorry that I took so long, but to be honest, I forgot about it until yesterday. Hope I'm in time for the newsletter. If you have any questions about the mods, please feel free to call.

Sincerely,

Kenneth H. Bates

```
20      !
        !       M O D I F I C A T I O N   H I S T O R Y
        !
        !       VER/ED          EDIT DATE       REASON
21!     1.1                     15-Mar-78       Lines 32010-32016, 32495 inserted
                                                to allow auto-baud detection. The
                                                system is set to answer the phone
                                                at 110 baud, when the connection
                                                is made, the user types <RETURN>
                                                which will cause the system to
                                                select the correct baud rate. If
                                                the user types ^C or ^Z, or the
                                                file '$TTYSET.SPD' is missing,
                                                auto-baud detection is aborted.
                                                This logic will only handle baud
                                                rates of 110, 150, and 300 baud,
                                                and will only work on dial-up
                                                lines.
22!     2.1                     15-Mar-78       Lines 200, 14000, 14020-14040,
                                                30000, 32000, 32405, 32410
                                                added/modified to always print
                                                the file '$APPEND.TXT' as part
                                                of the login procedure even if
                                                a '/' is used in the PPN. Both
                                                it and '$NOTICE.TXT' will only
                                                be printed if a user is running
                                                LOGIN from a logged out account
                                                and not just switching accounts.
24!     4.1                     15-Mar-78       Line 5210 modified to cause all
                                                projects [2,*] through [29,*] to
                                                chain to '!MENU', all other
                                                projects chain to '$DAY'. Normal
                                                program chaining is retained.


200     LO%=0%
        \ ON ERROR GOTO 32400
        \ I$=SYS(CHR$(0%))+SYS(CHR$(2%))
        \ OPEN "KB:LOGIN.CMD" FOR INPUT AS FILE 1%
        \ A$=CVT$$(SYS(CHR$(7%)),1%+4%+8%+16%+32%+128%+256%)
        \ A$=CVT$$(RIGHT(A$,FNC%(A$,"HELLO",5%)),8%)
        \ A$=CVT$$(RIGHT(A$,FNC%(A$,"LOGIN",3%)),8%)
        \ A%=PEEK(PEEK(PEEK(520%)+8%)+24%)
        \ GOSUB 16000 IF A%

5210    I$=SYS(CHR$(0%))+SYS(CHR$(2%))
        \ CLOSE 1%,2%
        \ PRINT
        \ IF N1% THEN 5220 ELSE
                P0%=SWAP%(PEEK(PEEK(PEEK(520%)+8%)+24%)) AND 255%
        \       IF P0%>1% AND P0%<30% THEN CHAIN '!MENU' ELSE
                        IF LO% THEN CHAIN '$DAY' ELSE
                                PRINT CHR$(10%); FOR I%=1% TO 3%
        \                       GOTO 32650
```

```
14000   IF LO%=0% THEN 19999 ELSE
                IF N% THEN
                        OPEN "$NOTICE.TXT" FOR INPUT AS FILE 2%
        \               PRINT FNC$;

14020   RESUME 14030

14030   OPEN '$APPEND.TXT' FOR INPUT AS FILE 2%
        \ PRINT FNC$;

14040   INPUT LINE #2%, I$
        \ PRINT I$;
        \ GOTO 14040

30000   LO%=0%
        \ ON ERROR GOTO 32400
        \ I$=SYS(CHR$(0%))+SYS(CHR$(2%))
        \ OPEN "KB:LOGIN.CMD" FOR INPUT AS FILE 1%
        \ A$=CVT$$(SYS(CHR$(7%)),1%+4%+8%+16%+32%+128%+256%)
        \ A$=CVT$$(RIGHT(A$,FNC%(A$,"ATTACH",3%)),8%)
        \ A%=PEEK(PEEK(PEEK(520%)+8%)+24%)
        \ GOTO 6000
                !
                !       ENTRY POINT IF "ATTACH"


32000   LO%=-1%
        \ ON ERROR GOTO 32400
        \ I$=SYS(CHR$(0%))+SYS(CHR$(2%))
        \ OPEN "KB:LOGIN.CMD" FOR INPUT AS FILE 1%
32010   WAIT 1%
        \ INPUT LINE #1%,A$
        \ WAIT 0%
        \ CHANGE LEFT(A$,2%) TO A%
        \ A$=CVT$$(A$,1%+4%+8%+16%+32%+128%+256%)
        \ A%=0%
        \ IF LEN(A$) THEN
                RESTORE ELSE
                        32010

32011   IF A%(1%)<>73% OR A%(2%)<>10% THEN 32020 ELSE
                OPEN 'KB:AUTO.BD' FOR INPUT AS FILE 2%
        \       OPEN '$TTYSET.SPD' FOR INPUT AS FILE 3%
        \       K%=(SWAP%(PEEK(PEEK(PEEK(PEEK(520%))+4%)+2%)) AND 255%)
        \       Q0%=SWAP%(CVT$%(MID(SYS(CHR$(6%)+CHR$(-3%)),7%,2%)))
        \       Q1%=SWAP%(CVT$%(MID(SYS(CHR$(6%)+CHR$(-12%)),9%,2%)))
        \       IF (PEEK(PEEK(PEEK(Q0%+Q1%)+K%*2%)+30%) AND 16384%)=0%
                        THEN 32016

32012   INPUT LINE #3%, I$
        \ I$=CVT$$(I$,-1%)
        \ I%=INSTR(1%,I$,',')
        \ IF I%=0% THEN 32012 ELSE
                IF VAL(LEFT(I$,I%-1%))=K% THEN 32013 ELSE 32012

32013   I1$=SYS(CHR$(4%)+CHR$(2%))
        \ C%=1%
        \ GET #2%
        \ FIELD #2%, 1% AS I1$
        \ N%=ASCII(I1$)
        \ IF N%=13% THEN N$='110' ELSE
                IF N%=102% OR N%=103% THEN N$='150' ELSE
                        IF N%=127% THEN N$='300' ELSE 32013

32014   I1%=INSTR(I%+1%,I$,',')
        \ IF I1%=0% THEN 32016 ELSE
```

```
                IF N$=MID(I$,I%+1%,I1%-I%-1%) THEN 32015 ELSE
                        I%=I1%
        \               C%=C%+1%
        \               GOTO 32014
32015   I$=SYS(CHR$(6%)+CHR$(16%)+CHR$(0%)+CHR$(K%)+STRING$(9%,0%)+CHR$(C%))
32016   CLOSE 2%,3%
32405   IF ERL=14030 OR ERL=14040 THEN 14900

32410   E%=(ERL/1000%)-9%
        \ IF E%>0% AND E%<=10% THEN ON E% GOTO
                10900,11900,12900,13900,14020,15900,16900,17900,
                18900,19900

32495   IF (ERL>32010% AND ERL<32020%) THEN
                RESUME 32016
32767   END

Ready
```

ASCII TO EBCDIC

```
00110 DIM T%(128)
00120 FOR I% = 1% TO 128%
00130     READ H$
00140     T%(I%) = FNX9%(H$)
00150 NEXT I%
00160 T%(0%) = 128%
00170 CHANGE T% TO T$
00310 DATA 00,50.50,50,50,50.50,50.16.05.25,50.50,50,50,50
00320 DATA 50,50.50,50,50,50.50,50.50,50,50,50,50,50,50,50,50
00330 DATA 40,D0.7F,7B,5B,6C.50,7D.4D.5D,5C,4E.6B,60,4B,61
00340 DATA F0,F1.F2,F3,F4,F5,F6,F7.F8.F9,7A,5E,4C.7E,6E,6F
00350 DATA 7C,C1.C2,C3,C4,C5,C6,C7.C8,C9,D1,D2,D3,D4,D5,D6
00360 DATA D7,D8,D9,E2,E3,E4,E5,E6.E7.E8,E9,4D.50,5D,50,6D
00370 DATA 50,81.82.83.84.85.86.87.88.89.91.92.93.94.95.96
00380 DATA 97,98,99,A2,A3,A4,A5,A6.A7,A8,A9,4D.4F,5D,50,50
01010 ON ERROR GOTO 5010
1015 PRINT "FILE NAME ";:INPUT LINE F7$
1017 INPUT "RECORD SIZE";R%
01020 OPEN F7$ FOR INPUT AS FILE 1%
1030 OPEN "MT:" FOR OUTPUT AS FILE 2%,RECORDSIZE R%
1035 INPUT "DENSITY (1600/800) ";X$:IF X$="1600" THEN
      I%=MAGTAPE(6%,256%+1%,2%)
1040 FIELD #2%,R% AS M$
01050 I% = MAGTAPE(9%,0%,2%)
2030 INPUT LINE #1%,S$\S$=CVT$$(S$,4%)
02040 Z$ = XLATE(S$,T$)
02050 LSET M$ = Z$
2060 PUT #2%,COUNT R%
02070 GOTO 2030
05010 IF ERL = 2030 AND ERR = 11
         THEN PRINT "TRANSFER TO TAPE SUCCESSFULLY COMPLETED"
         ELSE PRINT "ERROR "; ERR; " AT LINE "; ERL
5015 IF ERL=2030 AND ERR<>11 THEN RESUME 2030
05020 CLOSE 1%, 2%
05030 GOTO 32767
32757 DEF FNX9%(C$)
32758 X9% = ASCII(C$) - 48%
32759 IF -1% < X9% AND X9% < 10% THEN GOTO 32761
         ELSE X9% = X9% - 7%
32760 IF 10% > X9% OR X9% > 15% THEN FNX9% = -1%:  GOTO 32766
32761 X8% = 16%*X9%
32762 X9% = ASCII(MID(C$,2%,1%)) - 48%
32763 IF -1% < X9% AND X9% < 10% THEN GOTO 32765
         ELSE X9% = X9% - 7%
32764 IF 10% > X9% OR X9% > 15% THEN FNX9% = -1%:  GOTO 32766
32765 FNX9% = X8% OR X9%
32766 FNEND
32767 END
```

DUANE L. STARK
data processing manager

1230 SOUTH PRIEST DRIVE
TEMPE, ARIZONA 85282
(602) 968-6241

JENSEN TOOLS AND ALLOYS • A BLISS & LAUGHLIN industry

```
1!!!!   EBASCI          31-MAR-76       VERSION 01      EDIT 00
2!!!!
!!!!!   PROGRAM TO CONVERT UNLABELED MAGTAPES TO STANDARD RSTS/E
!!!!!   FORMATTED ASCII DISK FILES.  CONVERSION FROM EBCDIC TO
!!!!!   ASCII AND CARRIAGE RETURN, LINE FEEDS AT THE END OF RECORDS
!!!!!   ARE OPTIONAL.
3!!!!   ANY NUMBER OF FILES CAN BE ON THE TAPE.  RESPONSE TO THE
!!!!!   "POSITION" QUESTION DETERMINES WHICH FILE IS CONVERTED.

5       DIM R$(128%)
10 ON ERROR GOTO 1000
20 GOSUB 2000           !SET UP TRANSLATE STRING
30 INPUT 'BLOCK SIZE';B0%,'RECORD SIZE';B1%:
        B2%=B0%/B1%             !GET INFO, COMPUTE BLOCK FACTOR
40 INPUT 'DO YOU WANT EBCDIC-ASCII TRANSLATION';Y$:
        Y%=(ASCII(Y$)=ASCII("Y"))
                !GET TRANSLATION SWITCH
50 C$="": INPUT 'DO YOU WANT CR,LF';Y$:
        C$=CHR$(13%)+CHR$(10%) IF ASCII(Y$)=ASCII("Y")
                !CR,LF STRING IF REQUIRED
60 INPUT 'OUTPUT FILE';F$: F$="KB:" IF F$="": OPEN F$ FOR OUTPUT AS FILE 2%
        !GET AND OPEN OUTPUT FILE
70 OPEN "MT:" FOR INPUT AS FILE 1%, RECORDSIZE B0%
75 INPUT "DENSITY (1600/800) ";X$
76 IF X$="1600" THEN X%=MAGTAPE(6%,256%+1%,1%)
80 FIELD #1%, I%*B1% AS D$, B1% AS R$(I%) FOR I%=0% TO B2%-1%
        !FIELD THE BUFFER
90 INPUT 'POSITION';P%          !GET POSITION NUMBER
100 I%=MAGTAPE(9%,0%,1%)+MAGTAPE(3%,0%,1%)      !SET FOR REWIND ON CLOSE,
        AND REWIND THE TAPE
110 FOR I%=1% TO P%-1%
120 I1%=MAGTAPE(4%,32767%,1%): GOTO 120 UNLESS I1%
        !SKIP DOWN THE TAPE
130 NEXT I%

200 GET #1%: B2%=RECOUNT/B1%            !GET BLOCK, COMPUTE # RECORDS IN
                        BLOCK
210 FOR I%=0% TO B2%-1%
220 R$=R$(I%)+"": R$=XLATE(R$,T$) IF Y%         !TRANSLATE IF NECESSARY
230 P%=INSTR(1%,R$,CHR$(1%)): IF Y% THEN IF P% THEN PRINT
        'INVALID CHARACTER VALUE ='ASCII(MID(R$(I%),P%,1%));
                'POSITION'P%'RECORD'R
                        !INVALID CHARACTER CHECK
240 R$=R$+C$                    !APPEND EITHER "" OR <CR><LF>
250 R=R+1                       !COUNT # OF RECORDS
260 PRINT #2%, R$;              !OUTPUT RECORD
270 NEXT I%: GOTO 200           !GO DO ANOTHER RECORD, NEXT SECTOR

300 PRINT 'NUMBER OF OUTPUT RECORDS ='R: PRINT
310 CLOSE 1%,2%: GOTO 30

1000 IF ERR=11% THEN IF ERL/100%=0% THEN 32767 ELSE IF ERL=200% THEN
        RESUME 300              !CHECK END OF FILE ERRORS
1010 ON ERROR GOTO 0

1999!
        SET UP EBCDIC-ASCII TRANSLATION STRING
2000 DIM T%(256%)
2010 T%(0%)=255%: T%(I%)=1% FOR I%=1% TO 256%
        !INITIAL STRING
2020 T%(I%+129%)=96%+I% FOR I%=1% TO 9%         !ALPHA A-I (LOWER CASE)
2030 T%(I%+145%)=105%+I% FOR I%=1% TO 9%        !ALPHA J-R (LOWER CASE)
2040 T%(I%+162%)=114%+I% FOR I%=1% TO 8%        !ALPHA S-Z (LOWER CASE)
```

```
2050 T%(I%+193%)=64%+I% FOR I%=1% TO 9%          !ALPHA A-I
2060 T%(I%+209%)=73%+I% FOR I%=1% TO 9%          !ALPHA J-R
2070 T%(I%+226%)=82%+I% FOR I%=1% TO 8%          !ALPHA S-Z
2080 T%(I%+241%)=48%+I% FOR I%=0% TO 9%          !NUMERIC CHARACTERS
2090 T%(65%)=32%                                 !SPACE
2100 T%(209%)=125%                               !11-0
2110 READ I%,I$: IF I$='END' THEN 2120 ELSE T%(I%+1%)=ASCII(I$):
       GOTO 2110                  !SPECIAL CHARACTERS
2120 CHANGE T% TO T$: RETURN
2130 DATA  75,'.',   76,'<',   77,'(',   78,'+',   80,'&'
2140 DATA  90,'!',   91,'$',   92,'*',   93,')',   94,';'
2150 DATA  96,'-',   97,'/',  107.',',  108,'%',  109,'_'
2160 DATA 110,'>',  111,'?',  122.':',  123,'#',  124,'@'
2170 DATA 125,"'",  126,'=',  127,'"'
2180 DATA 0,"END"
2190 CHANGE T% TO T$: RETURN

32767 END
```

Business Computer Systems
POST OFFICE BOX 9846 / PHOENIX, ARIZONA 85068 602 - 266-7520

DRIVE TYPE	DEC LIST	BCS LIST Quan. 1-10	BCS LIST Quan. 11+
RK05	$ 99.00	$ 65.00	$ 60.00
RP02	$ Unknown	$185.00	$175.00
RP03	$325.00	$190.00	$180.00
RP04	$600.00	$360.00	$350.00
RP05	$600.00	$500.00	$485.00
RP06	$850.00	$520.00	$500.00

Floppies - No sectors,01 index, single side standard
Shugart compatible

	Quan. 1-400	Quan. 500+
Standard package	$ 3.75	$ 3.50
Plastic box w/index & labels	$ 4.25	$ 3.95

ABOVE PRICES FOR DECUS MEMBERS ONLY.

Phoenix Local User's Group
Minutes of March 13, 1978 Meeting

The second meeting of the Phoenix area Local User's Group was held at the Doubletree Inn, 212 West Osborne in Phoenix on Monday March 13, 1978. The meeting was called to order at 1:35 PM by PLUG Chairman Bill Boyle. There were 22 people present representing 16 user sites.

Tony Proborsky from DEC spent approximately one hour discussing the differences between RSTS/E V6B and V6C. As part of his presentation, a tape with all the patches thru the Feb. 1978 Software Dispatch was given to Bill Boyle for distribution to interested PLUG members. Tony also collected a list of the 8-10 sites that had not received version 1.5 of RMS-11K. He promised to look into the problem and obtain the distribution for these sites.

Bill Boyle entertained suggestions for a name for the group. PLUG (Phoenix Local User's Group) was chosen while noting that the group includes several members from outside the Phoenix area.

The next meeting was arranged and possible topics were determined. The meeting will be held on the Grand Canyon College campus on Monday June 12 at 1:30 PM. Topics will include a presentation on the task builder and reports of happenings at the Spring DECUS Symposium.

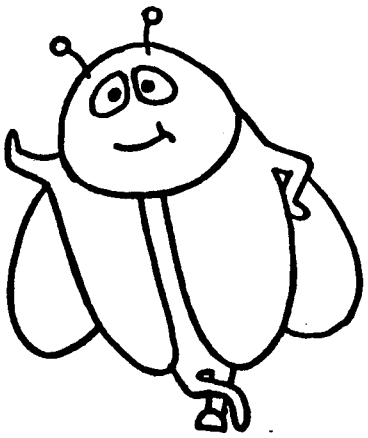
Frank Anderson asked for a policy statement on the distribuiton of the membership list to salesmen. The LUG was emphatic in saying that the membership information should not be given out. There was some discussion on the possibility of selling advertisments in the newsletter or in obtaining group discounts for PLUG members. Bill Boyle said he would pursue this further.

Frank Anderson asked if anyone had patches to LOGIN which would perform auto baud detect. Ken Bates volunteered to provide his patches. Since general interest was expressed, the patches will be included in the next newsletter. Someone also asked for a good EBCDIC/ASCII tape conversion program. Duane Stark will provide one for the next newsletter.

After a short break, Tony Proborsky answered some questions on the V6C patching facility and then presented an overview of the Datatrieve package. A short discussion of possible improvements in future releases of RMS-11K followed.

The meeting was adjourned at approximately 4:00 PM.

Frank Anderson
PLUG Secretary



debug

DEBUG is dedicated to establishing an interchange of ideas between business users of DEC computers in accounting allied applications, and between the users and DEC.

DEBUG MEMBERSHIP APPLICATION

Name _____ Title _____

Firm _____

Address _____ Telephone _____

City _____ State _____ Zip _____

BACKGROUND AND EXPERIENCES

Like all non-profit service orgnaizations, DEBUG can best serve its members by utilizing the skills, experiences and viewpoints of its own membership. To let us know where your own experiences and interests lie, we ask that you fill out the following vitae form. You may, of course, decline to do so – we will treat your response with respect and confidentiality in any case.

ACADEMIC BACKGROUND	favorite subject area	minor subject area	also studied
BUSINESS AREAS AND/OR FUNCTIONS	most experience with	fair experience with	worked around
COMPUTER SYSTEMS WORKED WITH	favorite system, language	also experienced with	smattering of

I would consider:

- ☐ Chairing a DEBUG session
- ☐ Organizing a session
- ☐ Working with the DEBUG steering committee

2/18/76

RSTS-11 SIG DECUS

DIGITAL EQUIPMENT COMPUTER USERS SOCIETY

RSTS-11 Special Interest Group

A Special Interest Group (SIG), as part of DECUS activities, has been formed to serve users of RSTS-11.

The organization of the SIG consists of a SIG Chairman, who will also act as the editor of any forthcoming newsletter, along with a DEC liaison and a SIG Coordinator. The DECUS office will handle the mailing list and circulation of the SIG newsletter. Submissions to the newsletter and other communications can be sent to the following address:

RSTS-11 Special Interest Group
c/o DECUS Office
129 Parker Street/PK3/E55
Maynard, MA 01754

SIG's activities encompass the following:

1. Preparation of a SIG newsletter (user submissions are strongly encouraged).
2. Exchange of user written programs. This exchange could include common interest BASIC-PLUS programs such as games, system accounting programs, and sort programs.
3. Establishment of communications with the DECUS staff to obtain for SIG members early information on RSTS-11 related additions to the DECUS Library. These communications will also serve to provide prompt testing of such submissions.
4. Establishment of user input to appropriate groups within DEC, so that they will receive user feedback on any additions or needed changes to RSTS-11. Additionally, respective SIG members may receive early warning from DEC about RSTS-11 changes.
5. Establishment of SIG maintained files of RSTS-11 errors and error solutions, where they exist.
6. Establishment of RSTS-11 "Welcome Wagon" type service to aid new users during system start-up.

If you wish to become a member of the RSTS-11 SIG, please fill out the form below and return it to the DECUS Office. (Please type or print.)

Are you a DECUS Member? _____ DECUS Membership Number _____

NAME _____

AFFILIATION _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

TELEPHONE NUMBER _____

Are you registered with DEC as an RSTS-11 user? _____

Version Number: _____

**Please note one must be a member of DECUS prior to requesting RSTS-11 SIG involvement. For general membership information, contact the DECUS Office, 129 Parker Street, Maynard, MA 01754*

DECUS Local User's Group Meeting

Monday, June 12

1:30 PM

Grand Canyon College
Fleming Classroom Building, Room 104
(Building 24 on map, parking directly north of building)